



Classification: Electric Generation System Specialist I	Position No. 3100-4841-xxx
CBID: R09	Office: Energy Efficiency Research Office
Date Prepared: December 2018	Division: Energy Research and Development
KEY: (E) IS ESSENTIAL, (M) IS MARGINAL	

Under the general direction of the Electric Generation System Specialist II, the incumbent serves as part of interdisciplinary and or interdivisional teams to plan and implement research, development, and demonstration (RD&D) projects that advance integration of energy efficiency research projects in support of buildings, industrial, agriculture, and water facilities. The goal is to reduce electricity use and load in buildings, industrial, agriculture and water facilities through integration of energy efficiency, load reduction, generation and distributed energy resource (DER) strategies and potentially using buildings and facilities as electric grid resources. The incumbent will work with a team to develop and oversee research, development and deployment activities needed to optimally design, deploy and integrate new and emerging energy efficiency and DER alternatives to provide grid support and meet the State's carbon reduction, Zero Net Energy, and efficiency goals for building and industrial facilities. The incumbent identifies methods, models, and techniques to evaluate community-scale impacts of energy efficiency and DERs on providing grid flexibility; develops, tests, and demonstrates new models and strategies to determine the ideal characteristics, design and beneficial energy efficiency and DERs. The team performs time-critical and subject matter-critical technical or market analyses to support public interest energy RD&D funding; manages complex RD&D projects and consults with experts in the field.

WORKING CONDITIONS.

The work is performed primarily in an indoor office and meeting room setting involving sitting, standing, and walking as well as sitting for long periods of time. Travel is required to conduct project site visits, attend workshops, hearings and meetings. Additional hours beyond an eight-hour workday or forty-hour workweek may be required. While performing the duties described below, the incumbent will be required to work alone and/or in a team environment; utilize a personal computer and appropriate Energy Commission software such as Microsoft suite of software, electronic mail, Internet and analytical models. The incumbent will be required to plan, organize, assist and/or participate in meetings with other Energy Commission staff, staff from other federal and state agencies, consultants, contractors, and other parties active in energy-related research and development.

DUTIES AND RESPONSIBILITIES:

40% Conduct EPIC Program planning and implementation, including implementation of the Triennial Investment Plans; conduct EPIC RD&D planning, contracting and grant award activities; and develop and implement innovative ideas, concepts and efforts to incubate new clean energy technology products and solutions through RD&D and market facilitation. The incumbent engages in completing complex technical analysis, evaluations, field demonstrations and system tradeoffs on the ability of new and emerging energy-efficiency technology integration, DER, and other energy technologies to conform to the planning and operational elements of providing electric grid support. Develop and use complex system models that will evaluate and assess the performance, reliability and capability of new energy



efficiency technologies integrated with DER to perform individually or within a larger portfolio of new technologies. Using and interpreting the output of computer models, the incumbent will evaluate the potential impacts of the new technologies on state mandated goals such as higher levels of energy efficiency and electricity generation from renewable resources, reduction of greenhouse gas emissions and criteria pollutants, maintenance of reliable electricity delivery, and reduction of natural gas use. (E)

- 25% Lead the research, design and development of new energy efficiency integration related to various research areas within the Efficiency Research Office, i.e. DER technologies to ensure that they will, whether taken individually or as a group, fit in within buildings or industrial communities, in terms of operation, characteristics, and benefits. The incumbent implements solicitations and collaborative strategies to meet EPIC Program goals through project development by defining the project scope, work statement, and budget. The incumbent reviews proposals to determine how well the project addresses the scope of the solicitation criteria including, but not limited to: the extent the project will advance science or technology, address market issues and needs, meet specified target goals and objectives; the skill and experience of the project team to carry out the technical tasks within budget and schedule, and move the results into the marketplace; and the adequacy of the project funding. The incumbent prepares written findings of such evaluations. The incumbent briefs Office, Division, and Commission management, and follows and reports on California Public Utilities Commission (CPUC) proceedings and California Independent System Operator (CAISO) initiatives as applicable and directed. (E)
- 10% Consult with and advise the Electric Generation System Specialist II, Office Manager, Division management and Commissioners on a variety of energy efficiency integration research needs related to DER technologies and their application on buildings, industry and the impact on the electricity generation systems. Participate in identification of issues and analytic methodologies. (E)
- 10% Participate in the development of the EPIC Program annual report to the CPUC and Integrated Energy Policy Report. Work with stakeholders and synthesize complex information from many sources into these and other policy reports. (E)
- 10% Follow proceedings at the CPUC and rulemaking, such as energy efficiency strategic plans and other initiatives at the CAISO that may impact or be informed by EPIC research projects. Summarize status and upcoming needs of these proceedings and initiatives to guide research. The incumbent updates Office, Division, Commission management, and Commissioners on the CPUC proceedings and CAISO initiatives. (E)
- 5% Perform other duties as required consistent with the specifications of this classification. (M)

SIGNATURES			
I Certify That I Am Able To Perform, With Or Without The Assistance Of A Reasonable Accommodation, The Essential Job Duties Of This Position			
<div style="display: flex; justify-content: space-between;"> <div>Incumbent</div> <div>Date</div> </div> <div>Electric Generation System Specialist I</div>		<div style="display: flex; justify-content: space-between;"> <div>David Hungerford</div> <div>Date</div> </div> <div>Electric Generation System Specialist II</div>	